

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 October 2004 (28.10.2004)

PCT

(10) International Publication Number
WO 2004/092696 A1

(51) International Patent Classification⁷: G01K 1/14, 1/16

(21) International Application Number:
PCT/GB2004/001620

(22) International Filing Date: 15 April 2004 (15.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0308682.4 15 April 2003 (15.04.2003) GB
0326318.3 12 November 2003 (12.11.2003) GB

KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant and
(72) Inventor: KINSLER, Peter [GB/GB]; 40 Park Road, Abingdon, OX14 1DS (GB).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

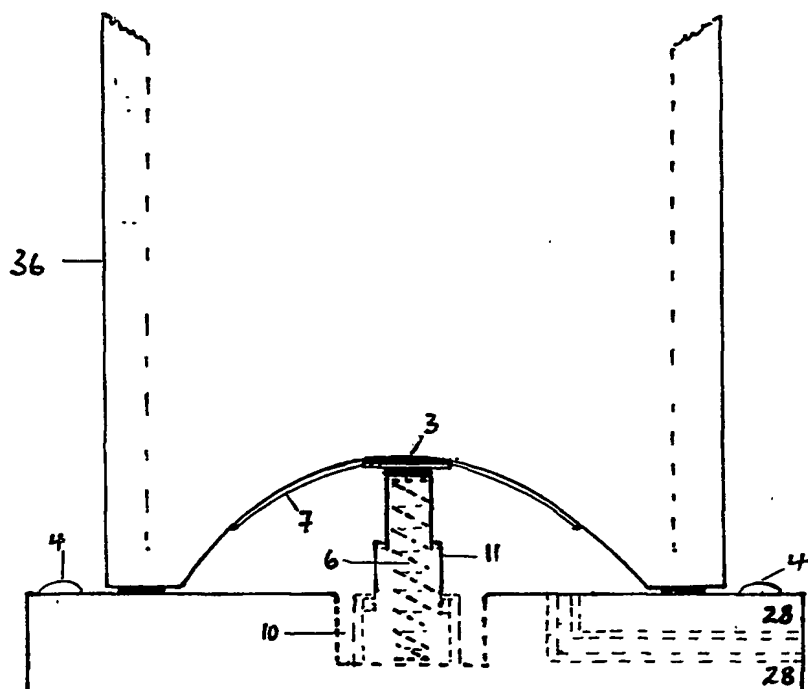
Published:

— with international search report

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THERMOMETER



(57) Abstract: The present invention relates to the field of thermometers for measuring the temperature of the liquid contents of containers. It is undesirable to open a container (such as a wine bottle) to measure the temperature of its liquid contents. Nevertheless, it is otherwise problematic to follow the temperature change in a container placed in either a cooling or heating incubator. The present invention provides a device for externally estimating the temperature of the liquid contents of a container (36) with a concave base (particularly wine bottles), comprising a support means (1) with contacting portions (2) for contacting the base of said container (particularly at its perimeter), a temperature probe (3) positioned within the support means (1) such that in use the probe (3) may measure the temperature within the space enclosed by the concave base of the container and the support means (1), and a system for displaying the estimated temperature of the container's liquid and/or indicating when the desired temperature has been reached.